Model No.: **MX0408-310**

VISION HD®

Operating Instructions

Thanks for purchasing our product.
Please be sure to read this instruction manual
carefully before using our product.

Introduction

Vision HD's MX0408-310 is a 4-by-8 DVI/HDMI true matrix. It allows any source (Blue-Ray player, HD DVD player, satellite receiver, game system, etc.) to be shown on the any of the eight displays simultaneously, no matter the source is HDCP or not. Extra infrared receiver extension, IR emitter, RS485 and Ethernet port are supplied for remote control.

MX0408-310 has the ability of equalization and amplification to ensure HDMI signal's transmission through long cable without quality loss.

MX0408-310 offers solutions for digital entertainment center, HDTV retail and show site, HDTV, STB, DVD and projector factory, noise, space and security concerns, data center control, information distribution, conference room presentation, school and corporate training environments.

Contents

HDMI Matrix (Router Type) 1
Product Overview 1
Features 1
Package Contents 3
Connections and Operations 3
Specifications 6
Panel Descriptions 7
Typical Application 8
Maintenance 9
Product Service 9
Provided Service 9
Mail-In Service 9
Warranty 10
Warranty Limits And Exclusions 10

HDMI Matrix (Router Type)

■ Product Overview (Model Number: MX0408-310)

■ Features

- Easy to use: install in seconds, no need for setting.
- Allows up to four HDMI audio/video devices to be independently switched to eight HDMI monitors, HDTVs, or projectors.
- The eight outputs could show the same or different source simultaneously no matter the source is HDCP or not.
- The eight outputs are all include one HDMI-A connecter and one dual RJ-45 connecter. They can output simultaneously.
- Support high definition resolutions 1080p, 1080i, 720p and other standard video formats.
- Each port supports HDMI or DVI inputs.
- With extra infrared receiver extension.
- Five switching modes: panel buttons, local IR, IR call back from remote rooms, RS485 and Ethernet.
- IR emitter for IR call back function to control the HDMI source from remote rooms.
- HDCP compliant.
- HDMI 1.3 version.

✍ Notice

Vision HD reserves the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.

⚠ Warning

To reduce the risk of fire, electric shock or product damage:

1. Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

6. Clean this apparatus only with dry cloth.

2. Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure the unit is well ventilated.

7. Unplug this apparatus during lightning storms or when unused for long periods of time.

3. To prevent risk of electric shock or fire hazard due to overheating, do not obstruct the unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.

8. Protect the power cord from being walked on or pinched particularly at plugs.

4. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Only use attachments / accessories specified by the manufacturer.

5. Do not place sources of naked flames, such as lighted candles, on the unit.

10. Refer all servicing to qualified service personnel.

■ Package Contents

① Main unit. P/N_MX0408-310.

② 12VDC Power Supply.P/N_VDC1204

③ 1x Remote. (Battery type: CR2025 3V)

④ 1x IR_RX(IR receiver extension cable).

⑤ 4x IR_TX(IR emitter cable).

⑥ 1x RS232 to RS485 convertor.

⑦ 1x USB to UART cable.

⑧ Operating Instructions. P/N_INS MX0408-310.

🕮 **NOTE1**: PART NUMBER (Abbreviation as P/N).

■ Connections and Operations

1) Connect the HDMI input sources (☞such as HD-DVD, PS3, STB etc) into MX0408-310.
2) Connect the HDMI outputs (such as HD-LCD, HD-DLP) into MX0408-310.
3) Power on the input source you want to show. (☞Keep the unused input power off, otherwise it may interfere the normal display).
4) Connect the power supply into MX0408-310 and turn on the display you want to watch.
5) Use remote or push the button to choose input source. Extra infrared receiver extension, IR emitter, RS485 and Ethernet port are supplied for remote control.
6) IR calls back from remote rooms to control the HDMI Matrix function.

   Enable the function: press the output2 selection button and the key lock button at the same time for about 3 seconds. After all the output1 LEDs and the output2 LEDs flash once, the function is enabled.

   Disable the function: press the output2 selection button and the key lock button at the same time for about 3 seconds. After all the output1 LEDS

and the output2 LEDS flash twice, the function is disabled.

7) Instruction on TX IR.

The sequence of "TX IR1，TX IR2，TX IR3，TX IR4" one-to-one correspond with "HDMI INPUT1，HDMI INPUT2，HDMI INPUT3，HDMI INPUT4". When an output chooses certain input, the call-back IR signal of RJ45 on this output port will choose the corresponding "TX IR" port to send the signal out.

For example, OUTPUT1 chooses INPUT3，then the call-back IR signal of RJ45 on OUTPUT1 will choose "TX IR3" to send the signal out.

NOTE: IR emitter should be sticked as near as to the DVD IR receive window.

8) SOURCE-SINK AUTOFIT Function.

This function applies to the situation when the source's HDMI version exceeds the sink's HDMI version. (☞This function can be used to fix the 1080p, 1080i, 2ch audio, multi channel audio issue).

For example: When the TV is HDMI 1.2 version and PS3 source is HDMI 1.3 version, it will output HDMI 1.2 version.

(1). Under default mode, this machine will output 1.2 version HDMI signal (1080p and stereo audio).

(2). Under button mode.

A、When the source is HDMI1.3, (e.g., HDMI output from PS3), OUTPUT1 to 4 both support HDMI1.3 displays, meanwhile the RJ45 is not connected to output port and is not connected to the input port, press "selection of OUTPUT1" and "lock key" simultaneously, the machine will output HDMI1.3 signals.

B、When the source is HDMI1.3, (e.g., the HDMI output from PS3), OUTPUT 1 to 4 are connected to the displays that can only support HDMI 1.2 MAX, or the RJ45 is connected to the output port, meanwhile the input port should not be connected, press "selection of OUTPUT1" and "lock key" simultaneously (no matter whether HDMI OUTPUT port is connected to the display that supports HDMI 1.3 or not), it will output HDMI 1.2 signals.

🕮 **NOTE:** The method to reset the machine to default EDID setting: Disconnect the input and output. Please press "selection of OUTPUT1" and "lock key" Simultaneously for at least 3 seconds, and EDID of all the four input ports will be reset to the default setting. The audio setting of the default EDID is stereo. It is suitable for TV sets.

9) DIP switch setting

There are three DIP switch on the PCB in the chassis. Below is the definition for the switch.

Position ID			UTP output mode and EDID
1	2	3	
0	0	0	EDID mix mode (see note 1), Dual UTP mode
0	0	1	EDID mix mode,Single UTP mode (see note3)
1	0	0	EDID copy mode (see note 2), Dual UTP mode
			EDID copy mode, Single UTP mode

🕮 **NOTE 1:** EDID mix mode: This is the default mode. In this mode, when you press "selection of OUTPUT1" and "lock key" simultaneously, the matrix will do the SOURCE-SINK AUTOFIT function.

🕮 **NOTR 2:** EDID copy mode: When you "selection of OUTPUT1" and "lock key"

simultaneously, the EDID of the HDMI input port will copy from the EDID of the sink device which is connected to the output 1. Only the input port which is selected to the output port1 can be updated the EDID data from output port1.

🕮 **NOTE 3:** Should use single UTP receiver such as EX0101-U58.

🕮 **Aattention:** Please insert or extract cables gently.

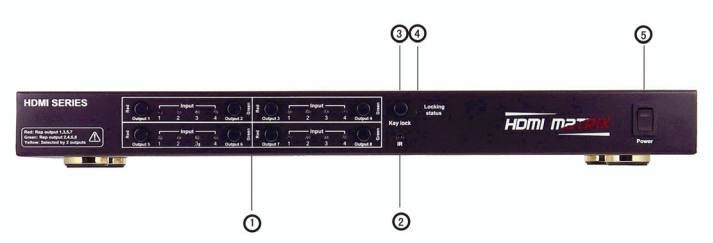
■ Specifications

Operating Temperature Range	-5 to +35°C (-41 to +95 °F)
Operating Humidity Range	5 to 90 % RH (no condensation)
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal	5 volts p-p (TTL)
Video Format Supported	DTV/HDTV:1080p/1080i/720p/576p/480p /576i/480i
Audio Format Supported	DTS-HD、Dolby true HD
Output Video	HDMI1.2 and HDMI 1.3
Maximum Transmission Distance	<15m (If needed, HDMI extender is optional)
UTP cable Transmission Distance	<50m(use Vision HD 50m UTP receiver, if need longer distance, Vision HD UTP repeater should be used)
Power Consumption	30wtts (Max.)
Dimensions	440mmL×202mmW×42mmH /17.3"L ×7.9"W×1.7"H
Mass (Main Unit)	2.5kg/5.5lb

🕮 **Note:** Specifications are subject to change without notice. Mass and dimensions are approximate.

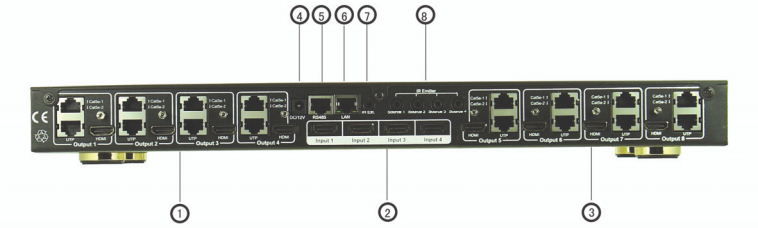
■ Panel Descriptions

Front Panel



① Output selection and indicator of input for output port 1 to 8.
② IR window.
③ Key lock button.
④ Indicator of locking status, when the output selection buttons are locked, LED inside lit.
⑤ Power switch.

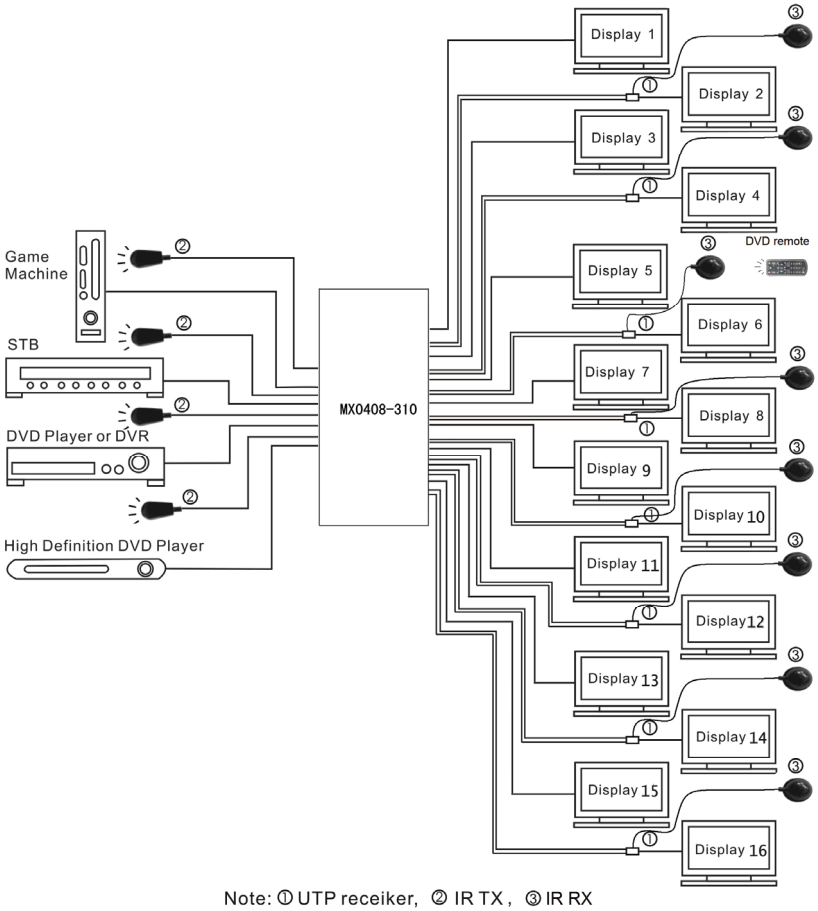
Rear Panel



① Output 1 and 4 with HDMI and CAT5E.
② Input ports 1 to 4 with corresponding .
③ Output 5 and 8 with HDMI and CAT5E.
④ Power input.
⑤ RS485 port.
⑥ LAN port.
⑦ IR extension.
⑧ IR TX port.

Note: RS485 port and LAN port are for matrix control. The LAN port is connected to the computer via direct UTP and connected to the router via cross UTP.

■ Typical Application



Note: ① UTP receiker, ② IR TX , ③ IR RX

■ Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzine to clean this unit.

■ Product Service

● Provided Service

1) **Damage Requiring service:** The unit should be serviced by qualified service personnel if:
   - The DC power supply cord or AC adaptor has been damaged;
   - Objects or liquids have gotten into the unit;
   - The unit has been exposed to rain;
   - The unit does not operate normally or exhibits a marked change in performance;
   - The unit has been dropped or the cabinet damaged.
2) **Servicing Personnel:** Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
3) **Replacement parts:** When parts need replacing ensure the service uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
4) **Safety check:** After repairs or service, ask the service to perform safety checks to confirm that the unit is in proper working condition.

● Mail-In Service

When shipping the unit, carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and

provide a daytime phone and/or email address where you can be reached.

If repair is needed during the limited warranty period the purchaser will be required to furnish a sales receipt/proof of purchase indicating date of purchase, amount paid and place of purchase. Customer will be charged for the repair of any unit received without such proof of purchase.

● Warranty

If your product does not work properly because of a defect in materials or workmanship, Vision HD (referred to as "the warrantor") will, for the length of the period indicated as below, （**Parts (1) Year， Labor(90) Days**）which starts with the date of original purchase ("Limited Warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

During the "Labor" Limited Warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

● Warranty Limits And Exclusions

1) **This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage.** The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning

damage, modification, or service by anyone other than a Factory Service Center or other Authorized Service, or damage that is attributable to acts of God.

2) **There are no express warranties except as listed under "limited warranty coverage". The warrantor is not liable for incidental or consequential damages resulting from the use of this product, or arising out of any breach of this warranty.** (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the service location, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive, but are for illustration only.)

3) **Parts and service, which are not covered by this limited warranty, are your responsibility.**

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